

## Epoxy resin/montmorillonoid nano-composite-material and its preparation method

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### Abstract of CN1354198

The present invention relates to an epoxy resin/montmorillonite nano composite material and its preparation method. Its montmorillonite disperse phase size is 10-100 nm, and its components and contents are (by weight portion): epoxy resin 100, intercalation soil 0.5-20, solidifying agent 0.5-50, accelerating agent 1.0-20, diluting agent 0.5-50 and solvent 10.0-80.0 in which the montmorillonite is the organic montmorillonite undergone the process of intercalation expansion treatment. Its preparation method includes the following steps: under the action of solidifying agent and accelerating agent, making montmorillonite and epoxy resin produce solidification reaction, and dissociating montmorillonite into nano particles, and making them uniformly disperse in epoxy resin base body so as to obtain the invented composite material with high mechanical property and heat-resisting property.

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